



HR Net

Connecting HR Providers

Information
Briefing
& Demonstration





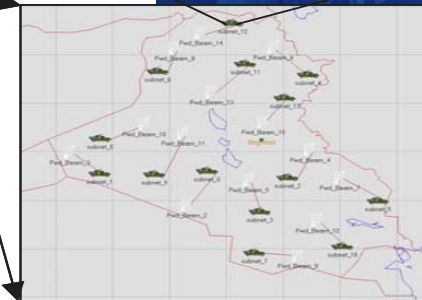
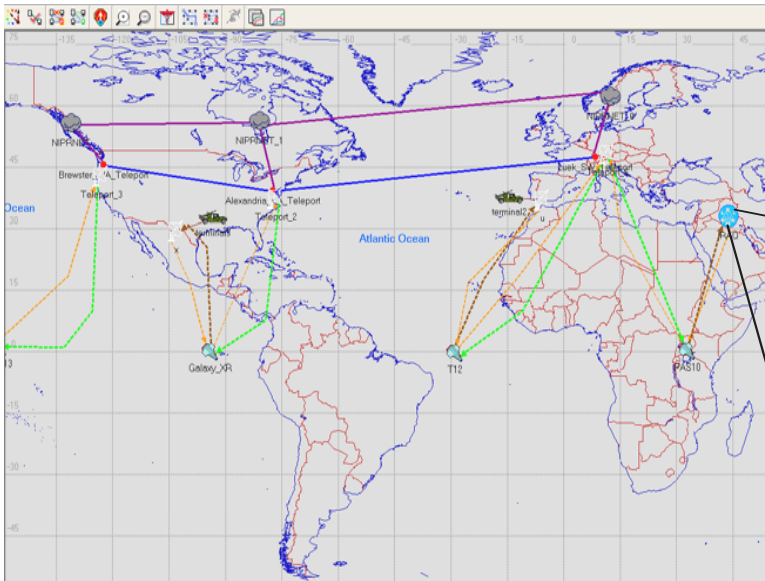
AGENDA

- Program Overview
- The Capability Deficit
 - ✓ The Situation
- HRNet - A Potential Solution
 - ✓ HR Applications
 - ✓ Challenges – On-Ground Situation
- Summary



Program Overview

Hardware and Architecture





What is CSS SATCOM / VSAT?

- **Combat Service Support Satellite Communications**
- Exploitation of IP-based commercial satellite technology
 - ✓ Very Small Aperture Terminals (VSAT)
- Provides “reachback” communications to the .mil
- Directly supports deployed combat service support business systems in the tactical battlespace
 - ✓ HR Functions, Logistics, Medical



What HR Providers are going to get... Remote CSS SATCOM Terminal

➤ Features

- ✓ 1.2 m motorized or manual antenna
- ✓ IP Access
 - Demand Assigned Multiple Access
 - 2 Mbps downloads
 - 256 kbps uploads
- ✓ Security
 - Bulk transport encryption
 - FIPS -140-2 Certification
- ✓ Transportable
 - 4 Transport cases
- ✓ Quality of Service
 - By Terminal ID
 - By IP address
 - By application type
 - By protocol



\$75K



What HR Providers are going to get... CAISI



- **CLIENT MODULE**
 - ✓ **CONNECT UP TO 7 COMPUTERS TO LAN**



\$4K

- **BRIDGE MODULE**
 - ✓ **CONNECT UP TO 14 COMPUTERS TO LAN**
 - ✓ **RADIO RELAY**
 - ✓ **DSL BACKUP**
 - ✓ **CONNECT TO Military/COMMERCIAL COMMUNICATIONS**



\$6K

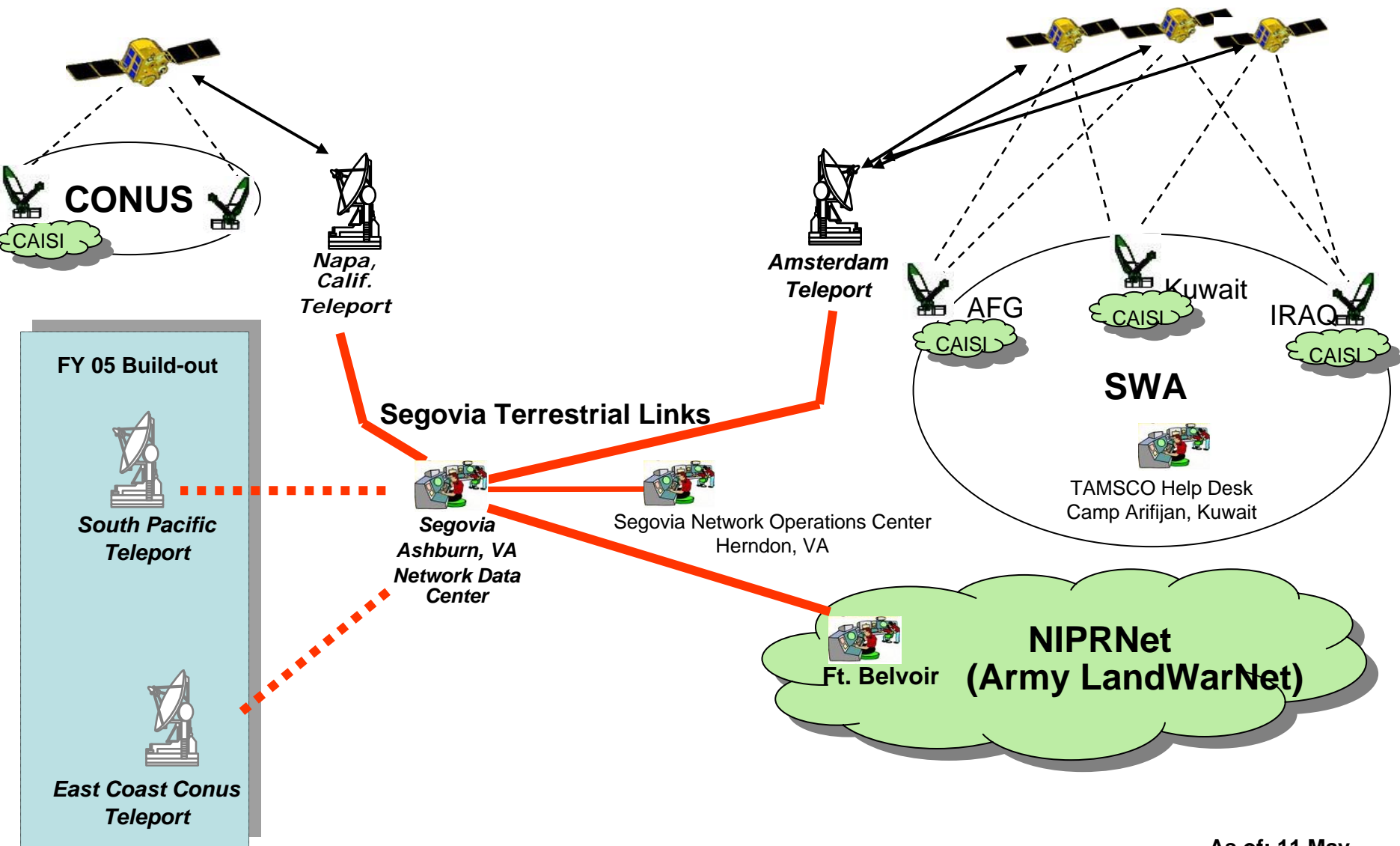
- **SYSTEM SUPPORT REPRESENTATIVE KIT**
 - ✓ **LAPTOP WITH COMPONENT CONFIGURATION SOFTWARE**



\$12K



Current CSS VSAT Architecture



As of: 11 May



The Capability Deficit

- Without dedicated and reliable connectivity there is ***no reachback***

Without **ReachBack** there is

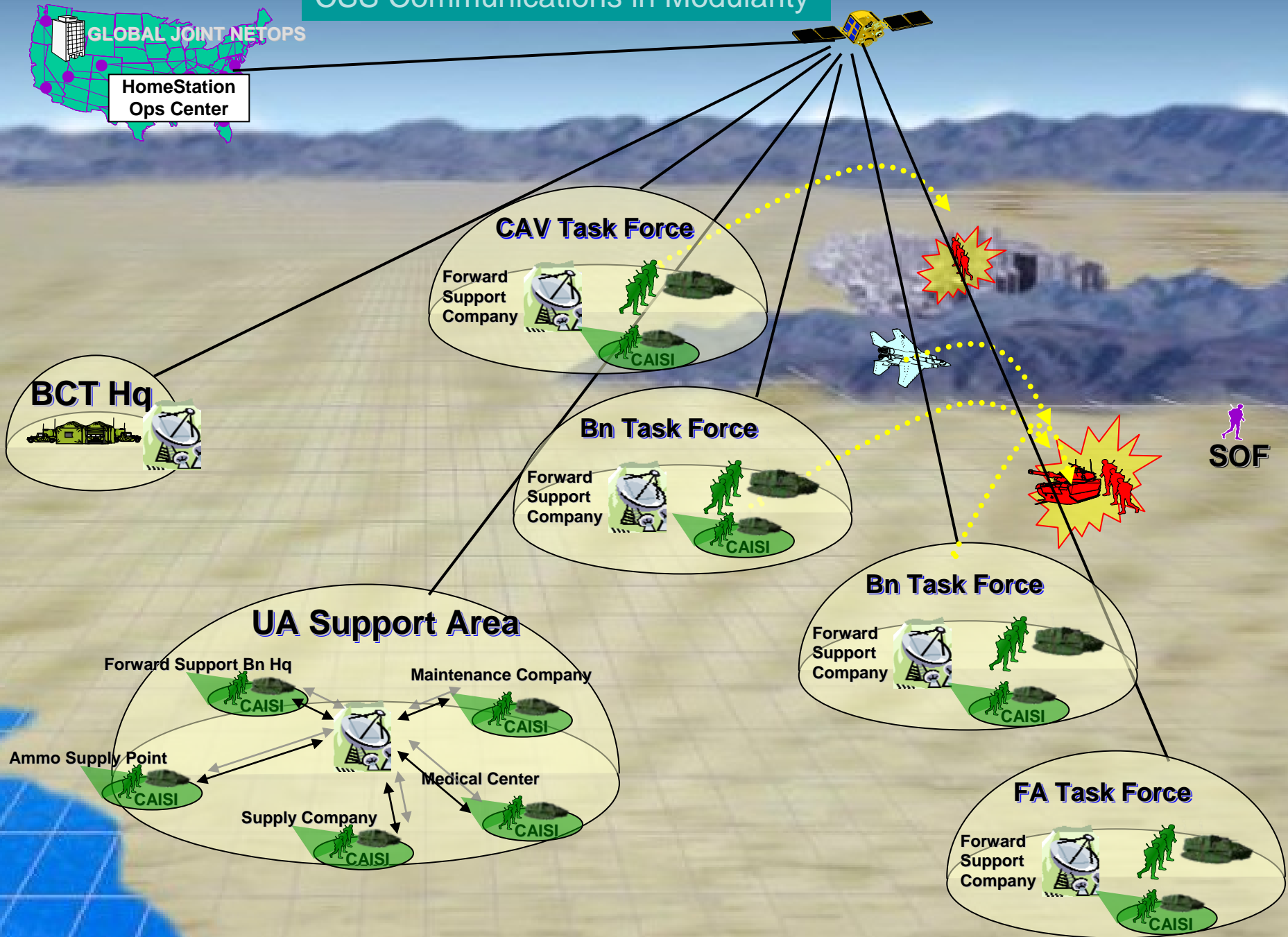
- NO HR Operations
- NO PSDR & DIMHRS achieved efficiencies



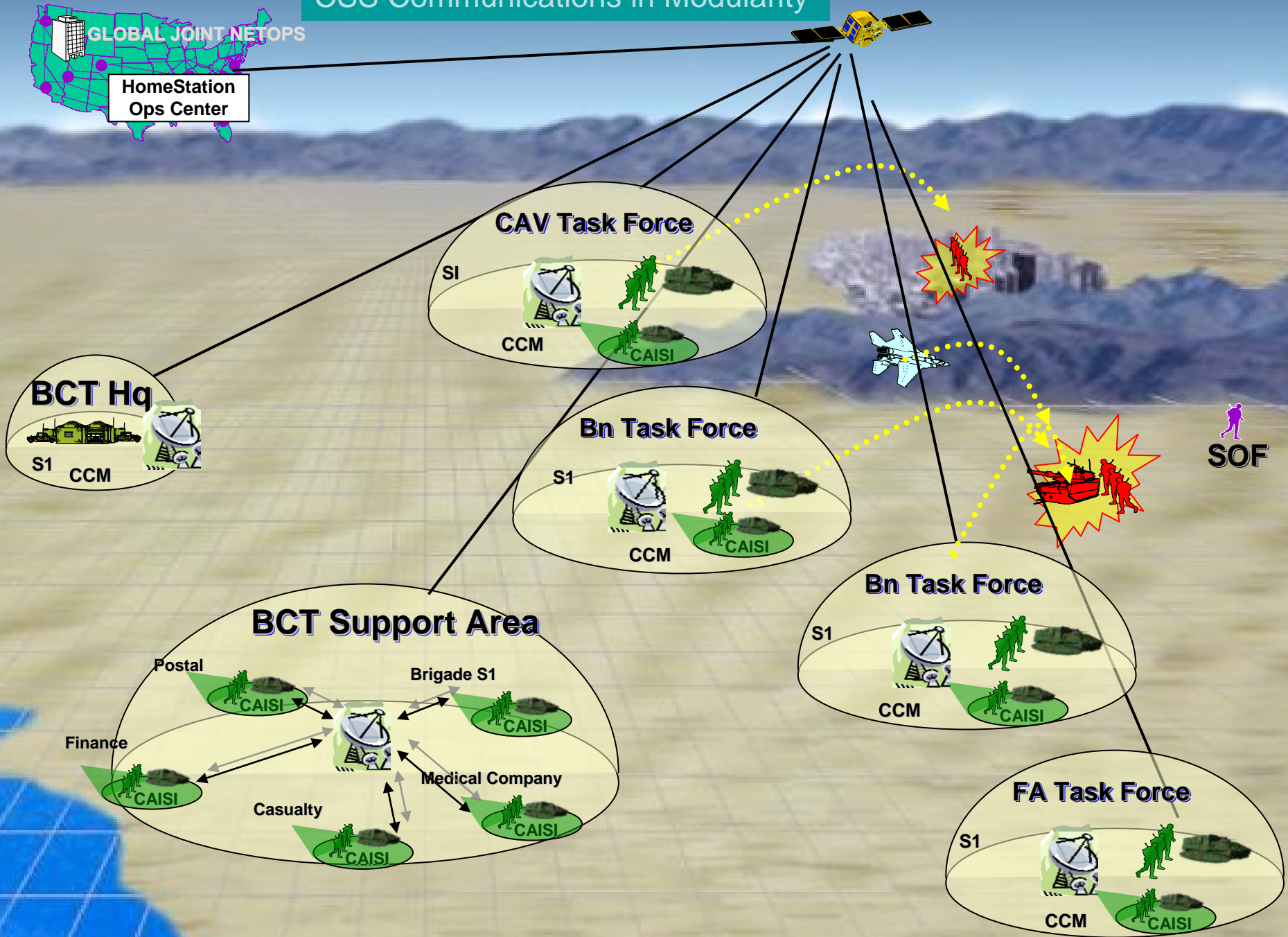
VSAT/CAISI in Support of OIF

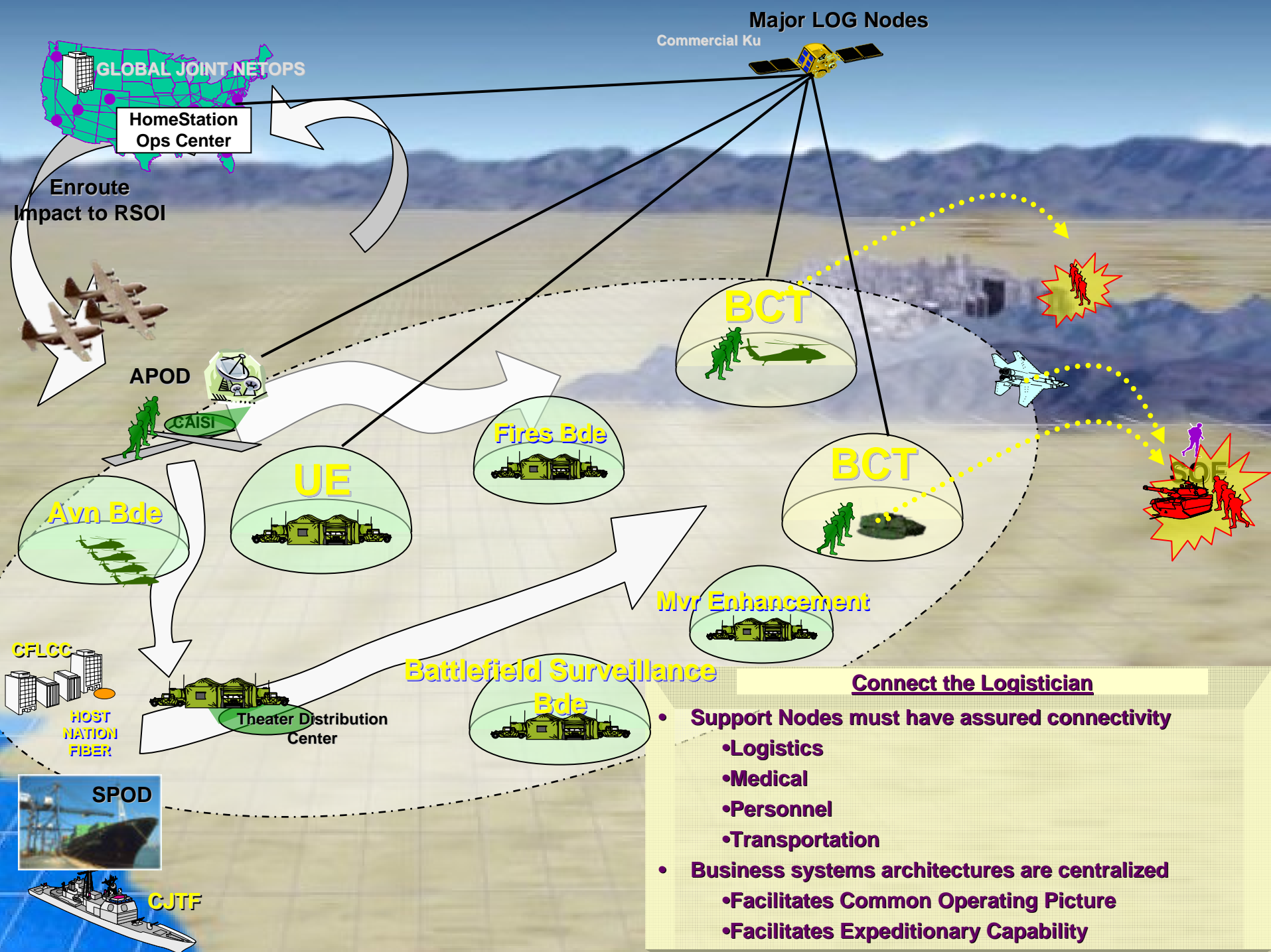
- Currently 53 VSAT/CAISI employed in Iraq supporting 3ID, USMC, 3ACR, 42ID
- G4 Fielding Scheme
 - ✓ FSC, FSB, UA SPT AREA, ASP, MAINT CO
- Potential Application for HR Providers
 - ✓ BN & BDE SI, POSTAL, FINANCE, R5, HRC, HRSC, CASUALTY REPORT & TRACKING

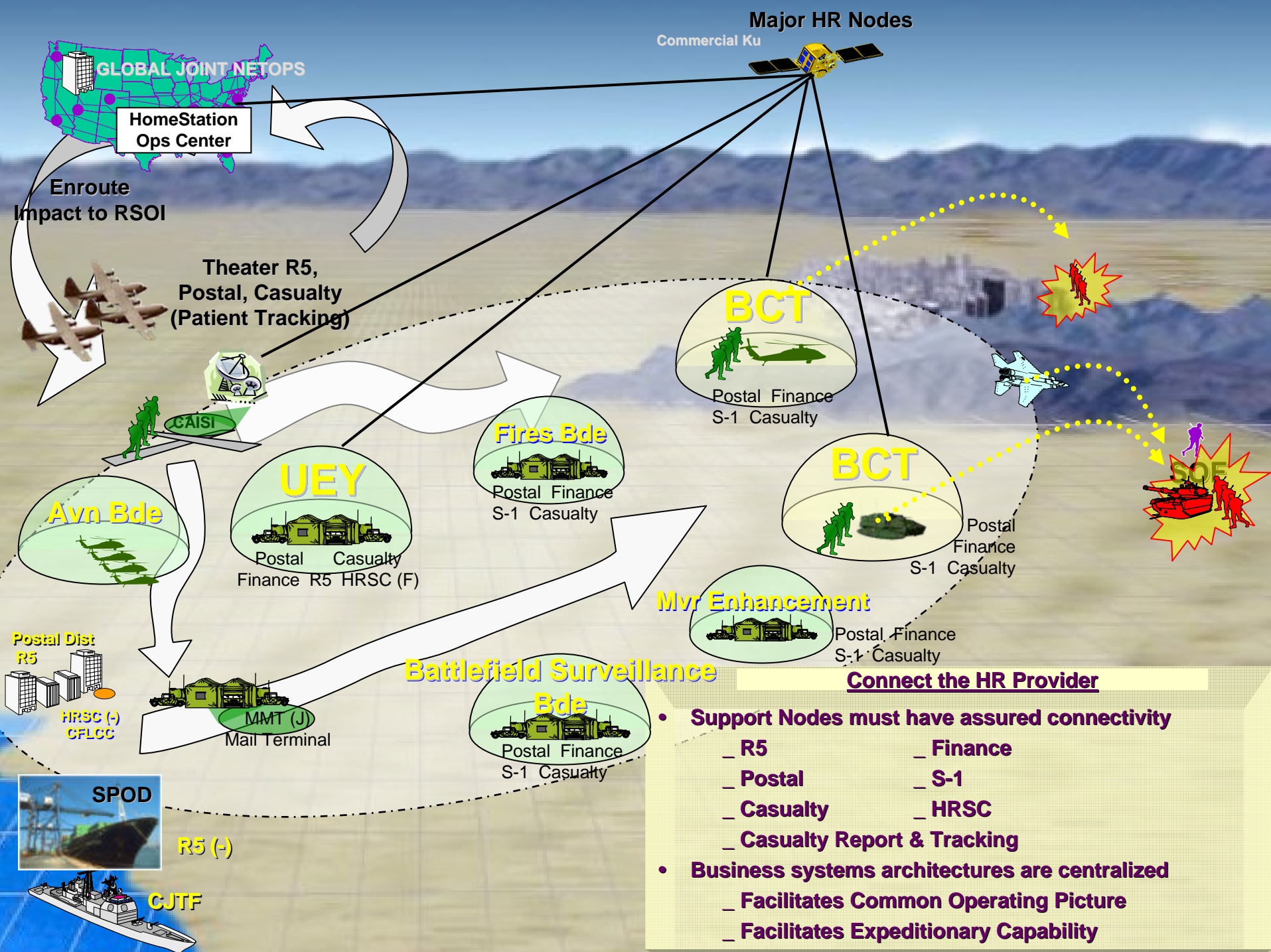
CSS Communications in Modularity



CSS Communications in Modularity









HR Net ... A Potential [Connectivity] Solution



**FUNDING &
FIELDING MAKES
THIS A REALITY**



How will HR Applications Operate via VSAT/CAISI ?

- To understand we tested seven (7) HR applications deemed common at the BDE support level
 - ✓ e MILPO
 - ✓ EDAS
 - ✓ TOPMIS
 - ✓ Retain
 - ✓ Digital Send (F2F)
 - ✓ CAC
 - ✓ DCIPS-F
- Applications were run individually and in combination
- Capture tools were utilized to determine unique bandwidth and system requirements



Conclusion

- All Applications are currently useable across the satellite network
- No reports of excessive application delay or performances issues
- Majority of applications are low-bandwidth



HR Community Challenges

- Familiarization and Training
 - ✓ 2 VSAT/CAISI to SSI *12 May 05*
- Real World Results
 - ✓ 3 VSAT/CAISI delivered to theater *June 05 (3SSB?)*
- Philosophical Course Correction
 - ✓ Best possible application is worthless if you can't connect reliably on demand
 - ✓ Connectivity Bandwidth is the pacing item & applications must be tailored to perform utilizing VSAT/CAISI



HR Community Challenges (continued)

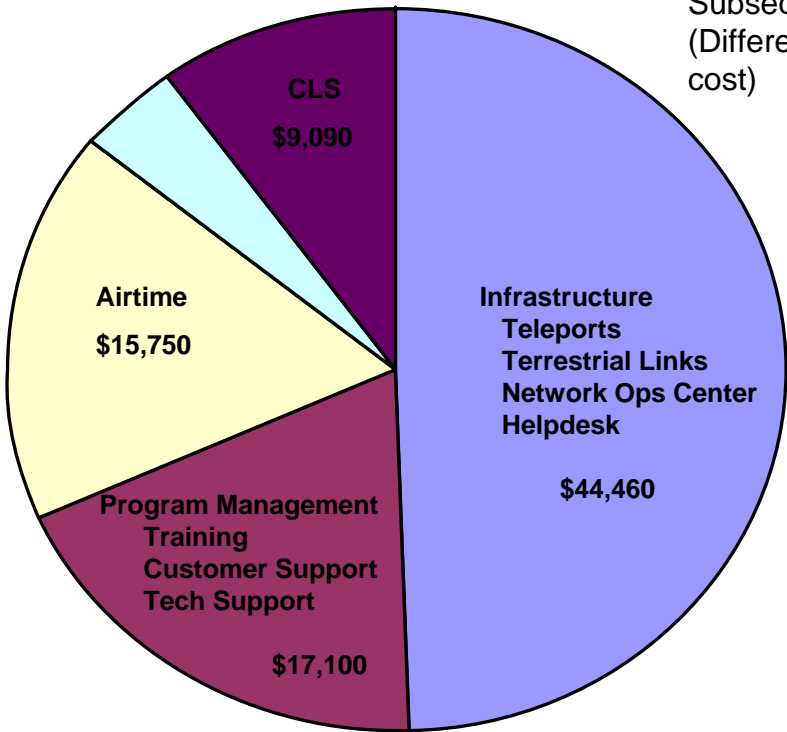


- HR Providers must demand access to CSS SATCOM
 - ✓ 1/4 Co-Location w/VSAT (w/capacity)
 - ✓ 1/4 Co-Location w/VSAT (w/o capacity)
 - ✓ 1/4 not Co-Located
 - ✓ Independent SRC 12 (HR Structure)
- Impediments to Connectivity (Firewalls, IP, Access) at host must be eliminated
 - ✓ Ongoing action at HRC



CSS VSAT: Per Year Operations and Maintenance Cost

1st Year Cost/Terminal = **\$90,000**
Subsequent Years Cost/Terminal = **\$86,400**
(Difference is Commissioning Fee, a one time cost)



- 24/7 Support help desk at ARIFJAN w/spares and parts kit
- 24/7 support NOC Herndon VA
- Contract Field tech spt (currently 10 in theater)
- 2-year warranty

Operational Ready Rates (1.2 M average)

SWA	
Operational	45
Spares	6
Non OP/RMA	2
Total	53
OR Rate	96%

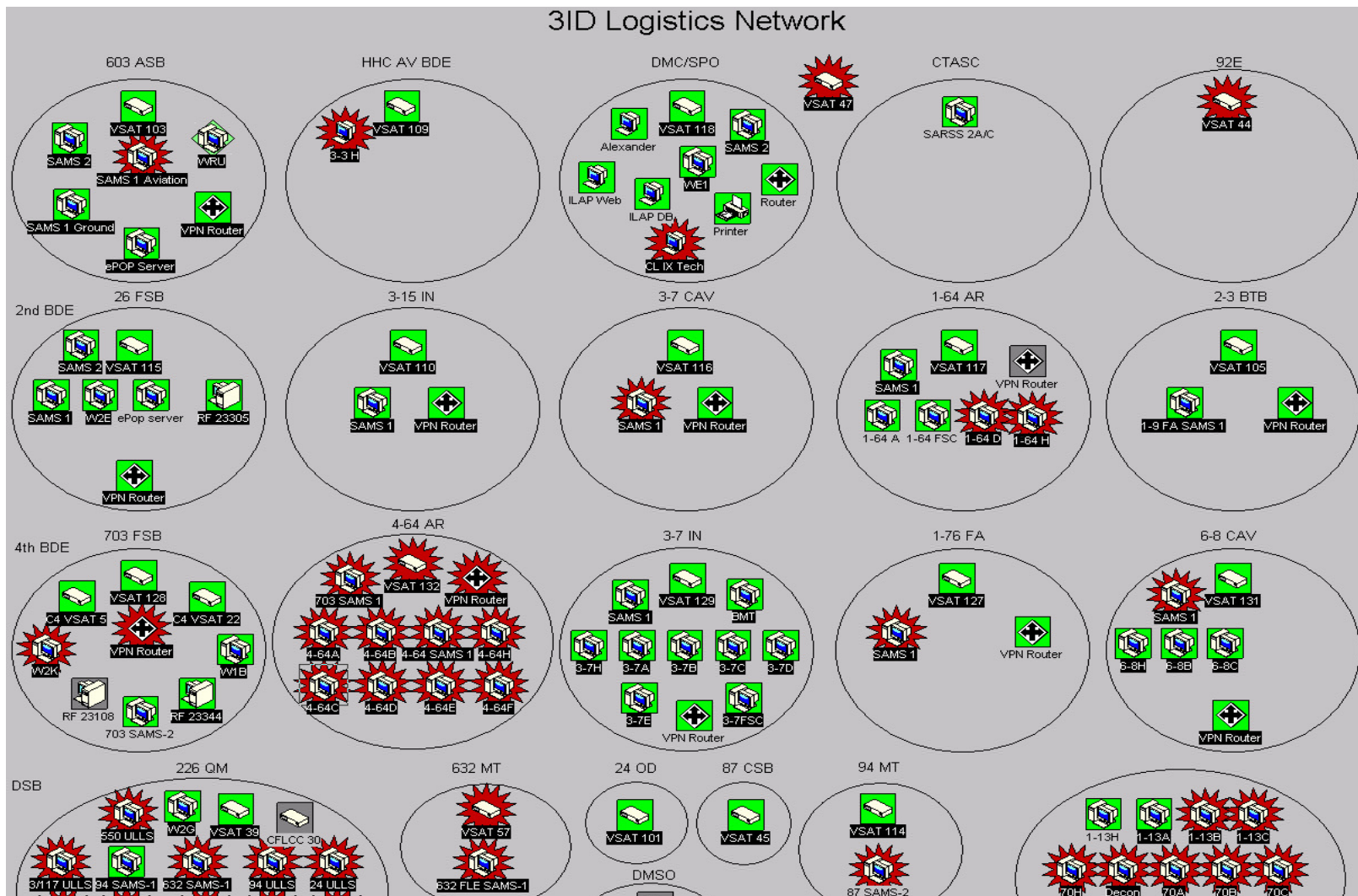
- Infrastructure 49.4%
- Program Mgt 19%
- Airtime 17.5%
- Commissioning Fee 4%
- CLS 10.1%

As of 20 April 05



Making a Difference

3ID CSS/VSAT Info Systems in OIF 3





Summary



Summary

- CAISI = A wireless LAN (last mile)
- CSS SATCOM = A VSAT based Wide Area Network (Beyond Line of Sight long-haul)
- CAISI + CSS SATCOM: A global network solution that extends the NIPRNET into the tactical battle space - connecting logisticians and their sensitive but unclassified (SBU) automated information systems.



Summary

➤ Capabilities and Features:

- ✓ Allows operations at the quick halt
- ✓ Supports up to SBU data transmission into the NIPRnet
- ✓ Completely IP-Based, re-packaged COTS
- ✓ CAISI and remote satellite terminals Soldier owned and operated
- ✓ Supporting satellite network infrastructure in sanctuary and contractor supported (system complexity is here, not with Soldier)

➤ Scope

- ✓ ~\$350M across POM and growing {Sustaining PEG}
- ✓ Multi-Service
- ✓ Global 24/7 enabler for Global War on Terrorism



Questions?

